

## PUBLICATIONS LIST (April 2022)

### Review articles in journals indexed in the Web of Science

*Experiments in vortex avalanches*

**Altshuler, E.** and T. H. Johansen

*Reviews of Modern Physics*, **76**, 471 (2004)

*Vortex avalanches in type II superconductors: the sandpile perspective*

**Altshuler, E.**

in Vlaev, Gaggero and Dvoeglazov (eds.) "Some Contemporary Problems of Condensed Matter Physics in Contemporary Fundamental Physics", Nova Science Publishers, 2001 (ISBN 156 072 8892)

*Entangled Active Matter: from cells to ants*

Hu, D., Phonekeo, S., **Altshuler, E** and Brochard-Wyart, J. F.

*The European Physical Journal – Special topics* **225**, 631 (2016)

### Standard research articles in journals indexed in the Web of Science

*Intruders cooperatively interact with a wall into granular matter*

Espinosa, M., Díaz-Melián, V., Serrano-Muñoz, A., **Altshuler, E.**

*Granular Matter* **24**, 39 (2022)

*Sink versus tilt penetration into shaken dry granular matter: the role of the foundation*

Alonso-Llanes, L., Sánchez-Colina, G., Batista-Leyva, A. J., Clément, C., **Altshuler, E**, Toussaint, R.

*Physical Review E* **105**, 024903 (2022)

*Design of a magnetically driven current cloak*

A.S. García-Gordillo and **Altshuler, E.**

*Journal of Physics D: Applied Physics* **54**, 325301 (2021)

*Rolling away from the wall into granular matter*

Díaz-Melián, V. L. Serrano-Muñoz, A., Espinosa, M, Alonso-LLanes, L., Viera-López, G. and **Altshuler, E.**

*Physical Review Letters* **125**, 078002 (2020)

*In-plane anisotropy in BSCCO superconducting tapes: Transport and magnetometric criteria*

García-Gordillo, A. S., Sánchez-Valdés, C. F., Sánchez-Llamazares, J.L. and **Altshuler, E.**

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*E. coli "super-contaminates" narrow ducts fostered by broad run-time distribution*

Figuroa-Morales, N, Rivera, A., Soto, R., Lindner, A., **Altshuler, E.** and Clément, E

*Science Advances* **6**, eaay0155 (2020)

An autonomous robot for continuous tracking of millimeter-sized walkers

A. Serrano-Muñoz, A., Frayle-Pérez, S., Reyes, A., Almeida, Y., **Altshuler, E.** and Viera-López, G.

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Cruz-García, A., Fernández-Gamboa J. R., **Altshuler, E.**, Jardim, R. F., and Muné, P.  
*Journal of Materials Science:Materials in Electronics (JMSE)* 30, 14320 (2019)

*Electrical effective parameters of the grains and the Montgomery's method in  $Bi_{1.65}Pb_{0.35}Sr_2Ca_{2.5}Cu_{3.5}O_y$  ceramics*  
Cruz-García, A., Fernández-Gamboa J. R., **Altshuler, E.**, Jardim, R. F., Vázquez-Robaina, O. and Muné, P.  
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*Microstructural and electrical transport properties of uniaxially pressed  $Bi_{1.65}Pb_{0.35}Sr_2Ca_{2.5}Cu_{3.5}O_{10+d}$  ceramic superconductors*  
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*A simple way for targeted delivery of an antibiotic: In vitro evaluation of a nanoclay-based composite*  
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*Exponential velocity profile of granular flows down a confined heap*  
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*Entangled active matter: from cells to ants.*  
Hu, D. L., Phonekeo, S., **Altshuler, E.** and Wyart, F. B.  
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*Incorporation of tramadol drug into Li-fluorohectorite clay: A preliminary study of a medical nanofluid*  
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*Smectite as ciprofloxacin delivery system: Intercalation and temperature-controlled release properties*  
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*Living on the edge: transfer and traffic of E. coli in a confined flow*

Figuroa-Morales, N., G. Miño, A. Rivera, R. Caballero, E. Clément, **E. Altshuler** and A. Lindner  
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*In-plane transport anisotropy in BSCCO-Ag multi-filamentary tapes*

Borroto, A., A. S. García-Gordillo, M. Arronte, L. Del Río and **E. Altshuler**  
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*Modeling transport properties of inhomogeneous superconductor-metal composites*

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**Altshuler, E.**, M. Pastor, A. Garcimartín, I. Zuriguel and D. Maza  
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